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 request depending on the reject time information attached to said retry request; and

5 (d) at said target node staying in the state capable of providing service, when a retry request is received, processing said retry request in the same manner as in said operation (c), while when a first request is received, returning a reject reply by attaching thereto reject time information.

10 3. A method for avoiding starvation at an initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service from said target node, said method comprising the operations of:

15 (a) at said target node, initializing to 0 all of a first parameter CE consisting of at least one bit, a second parameter SE consisting of the same number of bits as the number of bits of said first parameter, a third parameter CC consisting of the number of bits of  
20 determined by the number of said plurality of initiator nodes, and a fourth parameter SC consisting of the same number of bits as the number of bits of said third parameter;

25 (b) at said initiator node, sending a first request to said target node;

(c) when said first request is received at said target node, if  $CE = SE$  and  $SC = 0$  and if said target node is in a state capable of providing service, accepting said first request;

30 (d) when said first request is received at said target node, if  $CE = SE$  and  $SC > 0$  or if  $CE = SE$  and said target node is in a state incapable of providing service, incrementing said CE, setting said CC to 1, and returning a reject reply by attaching thereto the value  
35 of said CE in response to said first request;

(e) when said first request is received at said target node, if  $CE \neq SE$ , incrementing said CC and

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 which provides service and a plurality of initiator nodes which request service from said target node, said method comprising the operations of:

5 (a) sending a first request to said target node; and

(b) when a reject reply is received in response to said first request, sending a retry request by attaching thereto a parameter whose value is equal to the value of a parameter of reject time information  
10 attached to said reject reply.

6. An apparatus for avoiding starvation at an initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service  
15 from said target node, said apparatus comprising:

means for, when a request is received from said initiator node during a period that said target node is unable to provide service, returning a reject reply by attaching thereto reject time information that matches  
20 said period;

means for, when said target node is in a state capable of providing service, preferentially accepting a retry request carrying older reject time information; and

25 means for, when said target node is in the state capable of providing service, returning a reject reply by attaching thereto new reject time information in response to any first request received before retry requests arising previously rejected requests are all  
30 accepted.

7. An apparatus for avoiding starvation at an initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service  
35 from said target node, said apparatus comprising:

first means for, when a first request is received at said target node when said target node is in

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35                   tenth means for, when said retry request  
is received at said target node, if any of operation  
conditions in said seventh, eighth, and ninth means is  
not satisfied, returning a reject reply by attaching



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sixth means for, when a retry request is received, if  $RE = SE+1$  and  $SC = 0$  and if said target node is in the state capable of providing service,





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5                   a facility for, when said target node is  
in the state capable of providing service, returning a  
reject reply by attaching thereto new reject time  
information in response to any first request received  
before retry requests arising previously rejected  
10 requests are all accepted.

12. A recording medium readable by an apparatus for  
avoiding starvation at an initiator node in a computer  
network to which are connected at least one target node  
which provides service and a plurality of initiator nodes  
15 which request service from said target node, said  
recording medium having stored thereon a program for  
implementing:

20                                   a first facility for, when a first request  
is received at said target node when said target node is  
in a state capable of providing service, accepting said  
first request;

a second facility for, when a first request is received at said target node after said target node has moved to a state incapable of providing service, returning a reject reply in response to said first request by attaching thereto reject time information consisting of at least one bit;

30 a third facility for, when a retry request is received at said target node after said target node is restored to the state capable of providing service, accepting said retry request depending on the reject time information attached to said retry request; and

35                   a fourth facility for, at said target node  
staying in the state capable of providing service, when a  
retry request is received, processing said retry request  
in the same manner as processed by said third facility,  
while when a first request is received, returning a

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a sixth facility for, at said initiator node that received said reject reply, sending a retry

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15. A recording medium readable by an initiator node in a computer network to which are connected at least one target node which provides service and a

plurality of initiator nodes which request service from said target node, said recording medium having stored thereon a starvation avoiding program for implementing:

5 a facility for sending a first request to said target node; and

a facility for, when a reject reply is received in response to said first request, sending a retry request by attaching thereto a parameter whose value is equal to the value of a parameter of reject time

10 information attached to said reject reply.